

## TOILET TANK FILL VALVE AND METHOD OF OPERATION

ABSTRACT

[0092] A metered water control system inlet tube (24) receiving water conducting water into the interior of the tank to a diverter. A diverter (48) channels the flow to cause mechanical motion responsive to the channeled flow. A control valve (66 and 60), responsive to a mechanical switch, opens and closes access of the water from the inlet tube to the diverter. A mechanical switch (124, 112, and 114), responsive to flow of water from the diverter, closes the control valve automatically when a pre-determinable volume of water flows through the diverter. A discharge tube (20 and 24) receives water from the diverter to discharge the water into the tank. An actuator (158 and 162) linked to a flush arm of the toilet and linked to the mechanical switch causes the switch to open the control valve to allow the pre-determined volume of water to flow into the discharge tube.